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Report of the Council of the United Nations University for 1990

CONTENTS

		Paragraphs	Page
I.	OVERVIEW	1 - 26	3
II.	COUNCIL ACTIVITIES	27 - 37	7
III.	PROGRAMME ACTIVITIES: RESEARCH, TRAINING AND DISSEMINATION	38 - 130	10
	Programme Area 1: Peace, culture and governance	42 - 52	12
	Programme Area 2: The global economy	53 - 61	13
	Programme Area 3: Global life support systems	62 - 84	15
	Programme Area 4: Science and technology	85 - 101	19
	Programme Area 5: Population, health and human welfare	102 - 116	22
	Programme development	117 - 123	25
	Training activities	124 - 126	26
	Dissemination	127 - 130	27

* E/1991/30.

CONTENTS (continued)

		Paragraphs	Page
IV.	INSTITUTIONAL DEVELOPMENTS	131 - 143	28
V.	FINANCE AND FUND-RAISING	144 - 149	31
	A. Finance	144 - 145	31
	B. Fund-raising	146 - 149	32

Annexes

I.	United Nations University Council members	34
II.	List of publications of the United Nations University, January-August 1990	37

I. OVERVIEW

1. The year 1990 marked the beginning of research, training and dissemination activities under the University's second medium-term perspective for 1990-1995 (MTP II). Programme activities for the biennium 1990-1991, under five new programme areas, were initiated. It was also a period of several major developments that characterized the University's continued growth as "an international community of scholars".

2. The key to the University's growth lies in its two medium-term perspectives, for the years 1982 to 1987 and 1990 to 1995, which were designed to provide guidelines for programme activities and institutional development. The first MTP aimed at broadening the work of the University beyond its initial three programmes into an approach that focused on timely research on important emerging issues, while the second concentrates on developing strengths in certain areas through the University's institutional mechanisms. The main manifestations of this growth have been the research and training centres and programmes, ranging from those, such as the World Institute for Development Economics Research (WIDER), and the Institute for New Technologies (INTECH), as well as the projected Programme for Natural Resources in Africa, and the Programme for Biotechnology in Latin America and the Caribbean, to those now being explored. Explorations also continued or began in 1990 on a number of possible new research and training centres and programmes aimed at further strengthening the quality and scope of the University programme. The United Nations University Press was established as an essential component of a more coherent University-wide publication process.

3. The Centre began to elaborate the overall strategy for coherent institutional growth as outlined in MTP II, including improvements for the practical management of a large number of research and training centres and programmes. The Council welcomed this initiative and will receive a paper on it at its thirty-seventh session in summer 1991.

4. The new Director of INTECH, Professor Charles Cooper, was appointed in June and assumed office on 1 October. The first formal meeting of the Board of INTECH was held in Maastricht in November to discuss the initial programme of work.

5. Dr. Bede Okigbo, the new Director of the Programme for Natural Resources in Africa, was appointed in April as the first step towards the full realization of the Institute for Natural Resources in Africa (INRA). The Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO) has kindly offered temporary facilities at UNESCO's Regional Office of Science and Technology for Africa in Nairobi to accommodate the interim office for the Programme. The practical arrangements for setting up this office have been completed, and the Director will move to Nairobi. Consultations regarding INRA's further development continued.

6. The year 1990 was also the fifteenth anniversary of the establishment of the University's headquarters' in Tokyo and the beginning of programme activities. To commemorate this, the University organized three international symposia. The Symposium on the Mega-City and Mankind's Future was held at Tokyo in October to

review, within the context of an international comparative framework, the major policy responses of the mega-cities in the coming decades and to produce innovative policy recommendations. Its special focus was the trends and the dynamics of demographic change, the consequences of socio-economic transformation, and the effective management of living conditions and utilization of resources. The Japan-ASEAN Forum on "Development and Aid in ASEAN: the Role of Japan" was held in November to discuss issues related to development and aid in the ASEAN region and the role of Japan. It is planned as the first of a series of annual meetings, which will serve as a forum on various topics relevant to the development of the countries in the ASEAN region. A symposium on "The Impact of Chaos on Science and Society" is being planned for April 1991 to explore the impact of the emerging science of chaos on various scientific disciplines and the resulting implications for science and society.

7. The fifteenth year also saw the University's permanent headquarters to house the Centre in Tokyo begin to take physical shape, with the erection of its basic frame. Plans now call for the Centre's staff to move into the building in 1992.

8. The University's growth reflects an increased capacity to use its intellectual and academic capabilities to respond to critical contemporary issues of concern to the United Nations and its Member States. The University further increased programmatic cooperation with other organizations in the United Nations system working on problems or issues, such as rural/urban configurations; global life support systems; science and technology and society, money, trade and finance: reform for world development.

9. In addition, a more systematic collaboration between the University and the United Nations system is being pursued.

10. To this end, the Rector attended the meetings of senior officials in the economic and social sectors of the United Nations convened by the Director-General for Development and International Economic Cooperation, in January, at United Nations Headquarters. This provided an opportunity to interact with officials from other organizations, such as the United Nations Conference on Trade and Development (UNCTAD), the United Nations Environment Programme (UNEP), the Economic Commission for Africa (ECA), the Economic Commission for Europe (ECE), the Economic Commission for Latin America and the Caribbean (ECLAC), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic and Social Commission for Western Asia (ESCWA), the United Nations Centre for Human Settlements (Habitat), the World Food Council (WFC) and the World Food Programme (WFP).

11. A high-level meeting between the Rector and senior staff of UNU and officials of the United Nations Development Programme (UNDP) was also held in January at the UNDP headquarters in New York. The meeting highlighted the complementarity of interests of the University and UNDP, and the need for both institutions to cooperate, especially in the context of the next cycle (1992-1997) of UNDP programmes.

12. At the invitation of the Director-General for Development and International Economic Cooperation, the Rector also participated, together with senior

colleagues, in an informal meeting to exchange views on the basic perspectives and ideas on the Secretary-General's introduction to the United Nations medium-term plan for the period 1992-1997.

13. In July, the Rector and senior colleagues attended a meeting in Geneva on Cooperation among autonomous research institutes of the United Nations, organized by the Director-General for Development and International Economic Cooperation at the request of the General Assembly. Among the participants were representatives of the United Nations Institute for Training and Research (UNITAR), the International Research and Training Institute for the Advancement of Women (INSTRAW), the United Nations Institute for Disarmament Research (UNIDIR), the United Nations Interregional Crime and Justice Research Institute (UNICRI), the International Monetary Fund (IMF), the Economic Development Institute (EDI), the African Institute for Economic Development and Planning (IDEP), the Latin American Institute for Economic and Social Planning (ILPES) and the International Institute for Labour Studies (IILS). The meeting discussed various ways and means to enhance collaboration among the research institutes of the United Nations, particularly in regard to the formulation and implementation of UNU research and training programmes and plans. The meeting made a number of concrete recommendations. In this connection, the proposal by the University and the Centre for Science and Technology for Development to organize a Register of Research of the United Nations system was well received, and it was agreed to implement such a Register in a phased manner.

14. Following this meeting, in July, during the second regular session of the Economic and Social Council, the Rector participated in a panel on "The Integration of Eastern Europe and the USSR into the Global Economy: the Impact on the International Trade Regime and on Trade Prospects for the Developing Countries". His presentation drew on WIDER's work on the global economy.

15. Other examples of cooperation are:

(a) A workshop held last summer in Canada on "Developing Country Perspectives on National and International Policy Aspects of Global Warming", which was sponsored by UNU, UNESCO, the International Development Research Centre (IFIAS), the International Institute for Sustainable Development, and the Woods Hole Research Center. Twenty experts in international diplomatic and legal affairs participated. The primary objective was to make a meaningful contribution to the preparations for the Second World Climate Conference and the negotiations for a climate change convention;

(b) The mega-city symposium in Tokyo in October, organized with the United Nations Population Division of the Department of International Economic and Social Affairs, with the participation of representatives of Habitat, UNCRD, the World Bank, UNDP and other scholars;

(c) A major conference in cooperation with UNICEF, WHO, IDRC and voluntary agencies in Washington, D.C., held in November on "Rapid Assessment Methodologies for Planning and Evaluation of Health Related Programmes".

16. A WIDER research Conference on Hunger and Public Action, in July 1990, brought together high-level policy makers and academics from Africa, South Asia and Latin America to discuss the first results of WIDER's research programme on hunger and poverty and to help influence anti-hunger policies. The feedback from the conference provided useful insights on possible areas for further research.

17. Two workshops, "Rapid Assessment Procedures (RAP) for Child Survival and Other Programmes in Nutrition and Primary Health Care in Brazil and Portuguese-speaking Africa", held in Sao Paulo in August and in Nairobi in September, used as training material relevant UNU publications on the rapid assessment procedures, methodology and the training manual developed by UNU in collaboration with UCLA. The workshops aimed at providing training on the application of the rapid assessment procedures for the evaluation and improvement of programmes in nutrition and primary health care.

18. A planning workshop, entitled "Information Processing for Decision Making" was held in Paris in September to identify information technologies that may be appropriate for developing countries to help in the solution of problems related to complex man-made systems and to help formulate a possible research programme for implementation by the University. A position paper on possible relevant research is now under preparation describing the problems to be tackled by the UNU Project on Information and Decision Systems.

19. The Rector of the University continued the reorganization of the Centre to improve its capacity to respond to the financial, programmatic and administrative needs of institutional expansion. Thus, the programme division was organized under one Vice-Rector and a new division of Planning and Development Division was established. The University increased the output of research results, gained experience through the excellent performance of its Academic Publication Services, and took steps to organize the publications division as the United Nations University Press.

20. A meeting was held in Paris in July 1990 to discuss the University's fund-raising strategies and institutional development. Various consultants and advisers who have been assisting UNU with fund-raising and institutional development were invited; they included, among others, some former Council members. Another meeting was also held in Paris in September to consult on the University's institutional development strategy. An institutional strategy meeting also took place in October in Tokyo. Both meetings involved some former and current members of the Council. These consultations were designed to assist the University further elaborating its institutional development strategy, particularly the need for strengthening the University's institutional presence in developing countries. It is intended to present the initial results of these consultations to the Council in December for a preliminary discussion, which will assist the Centre in preparing a comprehensive strategy paper for Council consideration at its thirty-seventh session in June 1991.

21. The feasibility study on the establishment of a research and training centre on environment and human health at Ulm has been completed. In conjunction with the feasibility study, an international symposium on the same subject was held at the beginning of March.

22. Final discussions are in progress with the Governments of Portugal and China and the Macau authorities in relation to the UNU's Institute for Software Technology in Macau.

23. The University participated in the International Congress on the Global Forum on Environment and Development for Survival, held in Moscow on 15-19 January. The purposes of the Congress were to encourage further orientation of world leaders, both governmental and spiritual, towards a more comprehensive international political consensus connected with the protection of the life on Earth and to give a stimulus to new approaches for the creation and realization of an international strategy to overcome global ecological crisis. The Chairman of the USSR Supreme Soviet, Mikhail Gorbachev, addressed the Forum and the Secretary-General of the United Nations, Javier Perez de Cuellar, spoke at the opening ceremony and participated in the plenary session of the Congress.

24. A meeting of leading economists and policy makers from the socialist countries on East European Economic Reform was held at UNU/WIDER in Helsinki in March. The meeting provided a unique opportunity for an informal yet intensive exchange of information and ideas on the economic reform processes currently under way in Eastern Europe.

25. The review and evaluation of the work of WIDER got under way after consultation with the members of the Board of WIDER, the Chairman of the Council and the Government of Finland. An international team of specialists, headed by former Chairman and member of the Council, Professor Joseph Walter Kamba, was appointed for this task. A report will be presented to the Council in early 1991.

26. As of 31 December 1990, the University had received in actual payments $US 177.6 million to the Endowment Fund. During 1990, 21 Governments and two other benefactors pledged and/or contributed a total of $11.08 million to the University.

II. COUNCIL ACTIVITIES

27. The main concerns of the governing Council in 1990 related to the University's institutional and programmatic development, its dissemination activities, and its financial situation.

28. The Council met twice during the year: the thirty-fifth session was held at Maastricht from 25 to 29 June 1990 and the thirty-sixth session was held at the United Nations University headquarters in Tokyo from 10 to 14 December 1990 (see annex I for the list of members of the Council).

29. At its thirty-fifth session, the Council, concerned with the need to develop a strategic vision of the University's institutional evolution, focused on the organization of its work, on the fundamental issues involving the establishment of the research and training centres and programmes. The management of the Endowment Fund and the methods of achieving the longer-term objective of restoring its original value were also considered.

30. In this context, special consideration was given by the Committee on Finance and Budget to issues relating to the University's Endowment Fund, namely, its management and reinvestment in the Fund of all windfall gains in income arising from unanticipated changes in exchange rates. The Council requested the Rector to renew consultations with the United Nations Secretariat as to the most cost-effective and efficient manner of realizing the special investment needs and objectives of the University.

31. During this session, a Symposium on Emerging New Technologies was held to commemorate the establishment of and to mark the first activity related to the University's second research and training centre, the Institute of New Technologies (UNU/INTECH). The speakers included Dr. P. Kramer (former Director, Philips Natlab, the Netherlands), Dr. Carl Göran Heden (Karolinska Institutet Stockholm and President, World Academy of Art and Science) and Professor Jean-Jacques Salomon (Directeur, Centre science, technologie et société, Conservatoire national des arts et métiers, Paris). A Panel of Discussants, which included some Council members and members of the UNU/INTECH Board, and chaired by Sir John Kendrew, a Nobel laureate in Natural Science and former UNU Council Chairman, also participated.

32. Throughout the thirty-fifth session, the members of the Council and staff of the University enjoyed the efficient cooperation and gracious hospitality of the Government of the Netherlands, the Province of Limburg and the City of Maastricht.

33. The work of the thirty-sixth session concentrated mainly on the proposed supplementary and revised programme and budget of the University for the biennium 1990-1991, the implementation of programme activities under MTP II, new developments in the United Nations University Press, the preliminary report of the UNU/WIDER review and evaluation team, the management of the Endowment Fund and the report of the Council of the University for 1990.

34. A symposium, "The Changing World: Towards the 21st Century" was held during this session. Invited speakers were three eminent Japanese scholars: Professor Kuniko Inoguchi, Faculty of Law, Sophia University; Dr. Hiroshi Inose, Director-General, National Center for Science and Information System; and Dr. Michiyuki Uenohara, Executive Adviser, Nippon Electric Corporation (NEC).

35. At the session, the Council approved the supplementary and revised programme and budget for the biennium 1990-1991 on the recommendation of the Committee on Finance and Budget and of the Committee on Institutional and Programmatic Development, after having considered the report of the Advisory Committee on Administrative and Budgetary Questions (ACABQ), as follows:

INCOME, 1990-1991

(In thousands of United States dollars)

	UNU Centre	WIDER	INTECH	INRA	BIOLAC	Totals
Endowment Fund income	22 785	5 731	1 920	157	316	30 909
Operating contributions	3 000	-	1 142	-	-	4 142
Miscellaneous income	170	-	-	-	-	170
Specific programme contributions	4 079	5 481	-	1 175	1 600	12 335
Funds carried forward from 1988-1989 for concluding programme activities	1 028	-	-	-	-	1 028
Unencumbered fund balance	7 800	5 816	-	80	1 262	14 958
Totals	38 862	17 028	3 062	1 412	3 178	63 542

ALLOCATION OF FUNDS, 1990-1991

	UNU Centre	WIDER	INTECH	INRA	BIOLAC	Totals
Programmes	10 056	10 593	1 100	972	3 178	25 899
UNU Press	1 180	-	-	-	-	1 180
Library and programme equipment	86	55	410	175	-	726
Institutional development	2 214	-	-	-	-	2 214
Direction and management						
Staff costs	15 656	4 576	846	85	-	21 163
General expenses	4 654	1 804	706	180	-	7 344
Investment management of the endowment fund	590	-	-	-	-	590
Totals	34 436	17 028	3 062	1 412	3 178	59 116
Reinvestments in the endowment fund						2 800
Allocation to the contingency fund						1 626
Grand total						63 542

36. At its thirty-sixth session, the Council elected the following Chairman and Vice-Chairmen of the Council for 1991:

Chairman: Mr. Mihaly Simai

Vice-Chairmen: Dr. Mary Berry
Professor Joseph Ki-Zerbo
Dr. Lucille Mair
Dr. Rehman Sobhan
Professor Yao Erxin

37. At the same session, the Council also elected the Chairman and appointed members of the committees of the Council for 1991:

Committee on Institutional and Programmatic Development

Dr. Mary Berry (Chairman)
Dr. Keith Griffin
Dr. Candido Mendes de Almeida
Professor M. G. K. Menon
Professor Raimo Vayrynen

Committee on Finance and Budget

Professor Rehman Sobhan (Chairman)
Ambassador Kuniyoshi Date
Dr. Claude Frejacques
Dr. Sippanondha Ketudat
Dr. Rafael Portaencasa

Committee on Statutes, Rules and Guidelines

Professor Yao Erxin (Chairman)
Dr. Umberto Colombo
Father Felipe Mac Gregor
Dr. Abdel Salam Majali
Professor Josephine Guidy-Wandja

Committee on the Report of the Council

Dr. Lucille Mair (Chairman)
Father Alfonso Borrero
Dr. Lydia Makhubu

III. PROGRAMME ACTIVITIES: RESEARCH, TRAINING AND DISSEMINATION

38. The most important event in 1990 was the start of programme activities, including research, training and dissemination, under the University's MTP II, after the 1988-1989 transition period from MTP I (1982-1987). These activities, some of which have built on the results of past projects, but most of which are

new, are organized under five interrelated areas reflecting the major global issues on which the University is presently concentrating:

(a) Peace, Culture and Governance,

(b) The Global Economy,

(c) Global Life Support Systems,

(d) Science and Technology, and

(e) Population, Health and Human Welfare.

39. The first area focuses on fundamental global transformations, the conflicts they create within and between nations and approaches to resolving such conflicts, using primarily multilateral approaches and a fresh appraisal of governance. The second area concentrates on the major restructuring of the world economy and the ever-present problems of poverty, debt and environmental deterioration faced by developing economies. The third area examines the need to preserve the earth's life support systems by responding to the urgent and global nature of major environmental changes predicted for the coming decades. The fourth area, centring on the advances in science that could be a vital factor in dealing with global change, also covers the social impact of scientific knowledge, and the lack of access to it, on developing countries. The fifth area considers aspects of population dynamics and human welfare, including the approaching explosion of "mega-cities" throughout the developing world, as well as questions of nutrition, health and higher education.

40. Each programme has a major focus of research. Some projects have as an objective the dissemination of research through publications. Others concentrate on training. Most projects are now in an advanced stage of implementation, as shown under each programme area. Some are still in the early stages of planning, and are shown under Programme Development. All projects were developed in accordance with the University's Principles and Policies for Programme Planning, Implementation and Evaluation, adopted by the Council.

41. Training activities, which continued throughout the year, progressed primarily through the increase of resources for new fellowships, which came from cost-sharing arrangements with various institutions and external sources of funds. The establishment of the United Nations University Press and the development of plans for new activities have contributed significantly to dissemination. The University newsletter, Work in Progress, published two issues for the year on the themes "A Comprehensive View of the World in the 1990s" and "Universal Human Values". Reactions to the first issue have been very good, while they are still coming in on the second.

Programme Area 1: Peace, culture and governance

Governance and conflict resolution

42. While confrontation between major powers has receded, other forms of conflict have intensified, requiring new approaches to their resolution. These are conflicts not only between nations but also among institutions and opposing groups within nations. It is the latter that profoundly affect the problem of governance. Related issues derive from struggles for identity by national groups, whether on the basis of ethnicity, language, religion or region. Responses by States have been both positive and negative, and there is much to be learned from a comparative analysis of the ways these conflicts have been handled.

43. This programme aims at examining the underlying conditions for internal conflicts, particularly where they are manifested through direct violence. It will focus on the conceptual and theoretical problems related to identity conflicts and early warnings of internal conflicts, with special reference to third world countries. The objectives are: (a) to contribute to theory formation, through empirical examples, case studies and comparative research; (b) to develop a coherent framework for building knowledge and competence through regional training seminars and publication of research results; and (c) to help in understanding the domestic, legal and institutional arrangements for decentralization and devolution of central State power. The programme will work together with other institutions in strengthening policy proposals for conflict resolution.

44. As an initial step a programme meeting was held in May in Bogotá, Colombia, to review the programme proposal and activities for 1991-1992. Forthcoming activities include an international conference in March 1991, in cooperation with the Peruvian Peace Research Association (APEP), in Lima, Peru, on cultural violence, with special reference to the problems of Latin America. A meeting on conflict resolution in Asia is planned in cooperation with the International Peace Research Institute (PRIO), and two regional training seminars on conflict resolution and negotiation will be held in collaboration with local institutes and scholars, in both Latin America and Asia. In order to launch a combined UNU-United Nations Research Institute for Social Development (UNRISD) project on "Socio-economic and Political Consequences of the International Trade in Illicit Drugs", a planning meeting will be held in early 1991.

45. This programme took into account the results of the feasibility study on governance (Barcelona). Details are given in section IV (Institutional Development).

Multilateralism and the United Nations system

46. In a world faced with increasing major structural changes in the world order, it is imperative to understand their impact on the behaviour and power relationships between human groups and the capacity of international organizations, particularly those of the United Nations system, to respond effectively.

47. In this context, the programme will focus on investigating ongoing political, economic, socio-ideological, cultural and structural changes.

48. Initial activities include a consultative meeting, which took place in Paris in June, reviewed the draft programme proposal and identified initial research activities. Following on the meeting, four preliminary activities have been proposed: (a) a survey of research activities of the United Nations system; (b) comparative perspectives on multilateralism; (c) country case studies on perspectives of the United Nations system; and (d) changing socio-political structures and emerging forces.

Culture and development

49. This programme is designed to contribute to the World Decade for Cultural Development (1988-1997) by focusing on one of its four main objectives: namely, the acknowledgement of the cultural dimension of development. This will be carried out in close consultation with UNESCO.

50. The programme aims to contribute to improving the conceptualization of the cultural pluralism issue, from a regional and global perspective, and helping to create, through meetings and comparative research, regional and global networks of scholars and institutions.

51. Initial activities were carried out in the Asia-Pacific region. Two international conferences were held jointly with the City of Fukuoka in March and September on the theme of culture and development in Asia and the Pacific. The first examined the cultural dimensions of development in specific Asian historical contexts; while the second brought together the directors of institutes on Asian research from Asia, Europe and North America, to examine trends and plan cooperative efforts. Discussions were also held on a feasibility report on the proposed UNU institute on culture and development in the Asia and Pacific region.

52. On the basis of the positive outcome of these meetings, plans are under way to hold similar conferences in other regions with a view to designing a global programme.

Programme Area 2: The global economy

53. The UNU World Institute for Development Economics Research (WIDER) in Helsinki, Finland, is carrying out the programmes in this area. WIDER programme activities produced a number of working papers: two papers in the Research for Action series; the annual report of the World Economy Group for 1989, entitled World Imbalances; five books and the papers of a number of international conferences.

Hunger and poverty - the poorest billion

54. The first four volumes in the "Food Strategies" project series, entitled Hunger and Public Action, were published, and a conference was organized in Helsinki in July, bringing together policy makers from the developing world, including participants from sub-Saharan Africa. The first phase of the "Poverty, Social Change and Public Policy in Rural West Bengal" project has been completed with a preliminary report on selected villages. A meeting that will bring together experts based in India to comment on the work is scheduled for December. The "Quality of Life and Living Standards" project brought together philosophers and economists and other social scientists to investigate the basic questions defining the quality of life for developing countries. The manuscript on this research was completed and is in the process of being published.

55. "Human Capabilities: Women, Men and Ethical Objectivity" focuses on cultural relativism, especially in relation to the quality of life for women in developing countries. A draft of this research paper will be discussed at a meeting in the summer of 1991. The result of this project for devising comprehensive systems of social security in developing countries is ready for publication. It is entitled "Social Security in Developing Countries". The work on alternative development strategies and their implications for food entitlement and living standards compares experiences of India, Bangladesh and Sri Lanka in their post independence periods. An edited manuscript with an introductory chapter and nine papers on poverty, undernutrition and living standards is to be published in December 1990.

Money, finance and trade: reform for world development

56. This overview project on macro-economic policies seeks to deepen understanding of the functioning of the global economy. The Golden Age of Capitalism in 1990, the first in a series of four volumes, was published. A meeting in April considered drafts of detailed institutional analyses of sample countries' prospects for growth and development in the 1990s, along with a paper by the research adviser on foreign resource flows and developing country growth. A volume entitled Trade Policy, Industrialization and Development: New Perspectives, is in the process of being published.

57. The "Trade and Industrialization Reconsidered" project was launched after a planning conference in Ottawa in September. A study group issued a report on "Foreign portfolio investment in emerging equity markets" in March. The annual report of the World Economy Group on the economic future of Eastern Europe will be issued this year. A volume entitled Commodities in Crisis was completed for publication. Work on real wages and unemployment was completed during this year and a volume entitled Reconstructing Keynesian Economics with Imperfect Competition: Desk-Top Simulation is in the process of being published.

58. Other projects include: research on (a) mineral-based industrialization strategies and international industrial cooperation, and (b) the impact of commodity fluctuations on the economics of developed countries, which has been completed and monographs published. Work was also initiated during the year on a

major programme relating to the policy and institutional aspects of economic reform in Eastern Europe.

Economics of environment and development

59. This project culminated in a major research conference at WIDER during September with a group of authors and selected experts convened to review 26 studies commissioned within the first phase of the project. These papers will be edited and published in mid-1991. A Round-Table on the Economics of Transnational Commons, organized jointly with the University of Sienna and the International Economic Association, will be held in April 1991. A background paper on central policy findings, after review by a group of eminent scholars in the field, will be presented to the 1992 United Nations Conference on Environment and Development.

Women in development

60. Studies commissioned last year were brought before research conferences in July. These consist of research on "Identity Politics in the Maghreb" and "Empowering Women in the Casualised Trades". A Conference on National Development, Identity Politics and Concepts of Feminism took place in October 1990, with publication of these papers planned for mid-1991.

61. A volume entitled Dominating Knowledge: Development, Culture and Resistance was published in June 1990. The "Development and Security" project focuses on two areas of inquiry: (a) Overdevelopment and underdevelopment; and (b) the military sector and global economic change. A meeting in July 1990 was held to discuss the progress of work and outline of future activities within the project. Other studies on women in development are now being planned.

Programme Area 3: Global life support systems

62. In addition to conferences and publications, a number of meetings and workshops were held to help prepare for major global conferences on world environmental issues.

Mountain ecology and sustainable development

63. This project investigates sustainable development in mountain regions and is concerned with human activities and the interaction of mountains and lowlands. It focuses on developing interdisciplinary methods and systematic approaches for the management of complex mountain ecosystems to combine the often conflicting objectives of conservation and development.

64. The main objectives are to review and assess research and training needs in environment and resource interactions between highland and lowland regions; support regional mountain research centres and develop networks of researchers; cooperate in the efforts to support research of the International Mountain Society

and the African Mountain Association, especially in developing countries; and provide scientific advisory service.

65. Toward these ends, the programme has carried out several activities in the past year.

66. One activity concerned the findings of the 1989 Conference "Transformation of Mountain Environments: Regional Development and Sustainability: Consequences of Global Change", held in Armenia, Union of Soviet Socialist Republics. A report on this conference was published in the UNU/International Mountain Society (IMS) journal Mountain Research and Development, and a proposal was made for the creation of a database for the natural and human resources of the Tajik Soviet Socialist Republic of Central Asia. This will be used to construct an electronic atlas and a series of scenarios for 1990, 2020 and 2050. The atlas would assist natural resource management strategies in this mountain environment and would also initiate a new UNU umbrella project for a series of research projects in the USSR, Pakistan and Nepal, utilizing a similar approach and methodology.

67. The second activity, with the African Mountains Association, organized a meeting on "African Mountains and Highlands: Dynamics of Resource Use Systems and its Consequences for Sustainable Development" in Rabat, Morocco, in conjunction with a two-day training course on geo-information systems development. Negotiations are under way with the University of Chile for a similar workshop in Latin America in 1991 which would contribute to the establishment of a Latin American Mountain Association.

68. The third activity is the quarterly Mountain Research and Development, which continues to be published jointly, but with the University of California Press now performing the publishing functions.

Programme for natural resources in Africa

69. The establishment of an Institute for Natural Resources in Africa (INRA) has experienced unavoidable setbacks in securing appropriate financial support. Recognizing the urgency of getting some activities started that would help lead to the eventual full realization of INRA, the Programme for Natural Resources in Africa was initiated to assist in various efforts to develop indigenous capabilities for the management and rehabilitation of Africa's natural resources and environment.

70. The main objectives of the programme are to strengthen institutions, help mobilize scientists and technologists, and provide them with the capacity to generate and apply knowledge and innovative technologies in formulating planning and policy options.

71. A distinguished African scientist, Dr. Bede Okigbo, was appointed Director of the programme in April. Since then, he has undertaken an assessment of African institutions in the area of natural resources and has begun the process of identifying institutional partners and researchers to work with the programme.

Human dimensions of global change

72. The Human Dimensions of Global Change Programme (HGDCP) is an international research undertaking sponsored by the University, the International Social Science Council (ISSC) and the International Federation of Institutes of Advanced Study (IFIAS). Its aim is to bring together social scientists and managers of human activities in research and related activities focused on investigating the human causes and consequences of global environmental change and related policy issues.

73. The programme is intended to improve scientific understanding and increase awareness of the complex dynamics governing human interaction with the earth as a whole system, to strengthen efforts to study social changes that affect the global environment, to analyse policy options, and to identify appropriate social strategies to deal with undesirable impacts of global environmental change or adapt where necessary.

74. The programme was launched in 1988 and some progress has been made in attaining its objectives. In 1990, the programme operated in five key areas and involved scholars in the social and natural sciences from different parts of the world in a number of important research activities and scientific meetings. The five areas are: (a) Global Climate Change: Strategies of Response, (b) Global Risk Assessment and Critical Environmental Areas, (c) Industrial Restructuring and the Analysis of Industrial Metabolism, (d) Legal, Ethical, and Industrial Dimensions of Global Change, and (e) Methods of Analysis, Modelling and Data Requirements. The activities undertaken include a number of key multilateral conferences and preparations for publications.

75. Manuscripts are being prepared for major publications to be published by the end of 1991 or early 1992. Some manuscripts, especially those covering policy issues, will be relevant inputs to the United Nations conferences planned for 1991 on climate and development, and in 1992 on environment and development. UNU is also cooperating, intellectually and financially with Butterworth Scientific (Publishers) in the publication of a new journal Global Environmental Change: Human and Policy Dimensions. The first issue is due to appear in December of this year. A section of the journal will report on related activities of the United Nations University.

76. In order to launch a more coherent approach to long-term social research in environmental change, UNU and ISSC (International Social Science Council) sponsored a symposium in Palma de Mallorca, Spain, in November. Two meetings were also held: one in March, in Moscow, on "Global Modelling" and another in Mexico, in November, on "Methodological Issues in Global Modelling: Linking the Micro to the Global". An international conference on "Ethics and Environmental Policies" was held in August/September, co-sponsored by the Fondazione Lanza, with a number of scientists from developing countries. A meeting on "Ethical and Legal Issues" was held in The Hague, in September, to discuss a planned publication "International Law and Global Change".

77. Since its first meeting in October 1989, the working group on Risk Assessment has formed study groups for papers to be published in a volume on "Global Risk

Analysis and Management". Chapter outlines have been completed and some chapters have already been submitted to the editors. A workshop on "Climate Change and Energy Policy in Developing Countries" was held in Canada in July/August, co-sponsored with UNESCO, IFIAS (International Federation of Institutes for Advanced Study), and ISSC. A working group was established to prepare a manuscript that would cover industrial restructuring and the analysis of industrial metabolism, the development of strategies for reducing atmospheric pollution, and restructuring economies to prevent further environmental degradation. The manuscript is scheduled for completion in mid-1991. As a contribution to the preparation for the United Nations Conference on Environment and Development in 1992, UNU and Dartmouth College will organize a meeting in June 1991 on "International Governance and Global Environmental Change".

78. The UNU has also been active in meetings of the Designated Officials for Environmental Affairs (DOEM) of the United Nations system.

Energy, technology and environment

79. Energy production is one factor - among others - associated with green house gases, acid rain, thermal and water pollution, release of radioactive nuclear fuels, land degradation and tropospheric ozone production. Technology can play a role in reducing environmental impacts through energy and materials conservation, emission and waste treatment, substitution among energy sources, fuels and materials, and recycling of waters. The programme explores options and strategies in this respect.

80. To this end, it will focus on contributing to the body of knowledge on the environmental applications of energy use and appropriate technological and political responses in order to provide decision makers with information on available and expected energy options.

81. A significant step in this direction was taken with the completion of the pre-feasibility survey for the establishment of a network of centres of excellence on New and Renewable Sources of Energy (NRSE). The cluster of projects in the programme would fall under the aegis of NRSE if it is established. For details see section IV (Institutional Development).

Sustainable development in the humid tropics

82. It is clear that the continuation of current deforestation and land management practices will be part of the disruption of the global climate and will decrease biodiversity, while bringing about economically and ecologically unsustainable development. The programme focuses on the complex interactions of physical and human activities in the humid tropics which cover about one fifth of the land mass of the earth. The overall aim of the programme is to promote ecologically, as well as socially and economically, sustainable development in the humid tropics through basic and applied research, training and dissemination.

83. In carrying out these aims, the programme will promote the scientific investigation of the humid tropics, with a focus on the climate, biotic and human interactions, and the importance to the global life support system. It will also try to identify the conditions needed for sustainable development and to promote the preservation of the natural biodiversity and global life support functions of the humid tropics.

84. All activities in this programme are new and, therefore, in an exploratory stage. UNU and Gadjah Mada University in Yogyakarta, Indonesia, together with the Australian National University have agreed to organize, in May 1991, an international conference on the subject "Toward Sustainable Environmental Future for the South-East Asia Region", to contribute to understanding of environmental issues as related to development in the South-East Asia region. A conference on the "Definition and Measurement of Sustainability" will also be organized in 1991. The programme is also planning extensive training in Brazil for African and Latin American Fellows on the subjects of remote sensing technology, and ecology and management of inland waters.

Programme Area 4: Science and technology

Implications of advances in science and technology

85. This programme is examining the consequences of technological change and developments at the frontiers of knowledge through various forms of debate and analysis, including special symposia. The primary goal of the programme is to develop an interdisciplinary and integrative approach to studying the implications of scientific and technological advances. As the economic development of a nation has become directly dependent upon the strength of its scientific base, concepts such as the management of technological pluralism and technology blending have emerged as keys to the implementation of technological polices for development. The consequent increase in the need for understanding of science policy issues implies a major expansion of such research.

86. The Institute for New Technologies (INTECH), which began operations when the new Director took office in October, will be concerned with the activities under this programme. (See sect. IV (Institutional Development).)

87. One activity related to the programme was a UNU-sponsored panel discussion on "Ethics in Access to Scientific Information", held in Sofia, Bulgaria, in October, during the General Conference of the International Council of Scientific Unions (ICSU). A second meeting on this subject is planned. In collaboration with the University of Tokyo, the first Tokyo seminar in the series: "The Impact of Chaos on Science and Society" is being planned for April 1991.

Science and technology for development

88. This integrative programme concentrates on producing and publishing an authoritative sourcebook that will address fundamental questions of science and technology policies. It will also organize regional training courses focusing on

aspects of the sourcebook, which will be designed mainly for policy makers in developing countries. The courses will also look at "Technology planning in Latin America" and "Technology information management in Asia".

89. Considerable progress has been made in achieving the initial objectives of this programme. Following an editorial meeting in June, abstracts have been prepared for the UNU Sourcebook on Science and Technology for Development. A final editorial meeting will be held in spring 1991. UNESCO's regional offices for Science and Technology in Latin America and Asia will jointly organize training courses, in March and August, respectively, utilizing sourcebook material and involving its authors. A course is also contemplated for Africa.

Biotechnology in Latin America and the Caribbean (BIOLAC)

90. The research and training activities of BIOLAC, which was established in 1988, are focused on three priority areas: vaccines and diagnostics; plant biotechnology; and microbial fermentations of industrial interest.

91. The programme aims at developing and promoting biotechnology for the improvement of the socio-economic well-being of the countries of the region by carrying out fundamental research in specific areas of biotechnology and genetic engineering and providing the infrastructure for a regional network of scientists to ensure that existing knowledge will be fully utilized and to reduce the time-span between scientific breakthroughs and their application. There has been progress in 1990 towards these objectives.

92. BIOLAC's Scientific Advisory Committee held its second meeting in Caracas, Venezuela, in April 1990. The Committee specifically recommended that the network approach be used for three areas of concern: plant biotechnology; diagnostics and vaccines; and micro-organisms of industrial interest. A five-day workshop was also held in Caracas on the Brucellosis Research Network. An agreement was concluded with Supply Services Canada for the project on "Study of Vaccination and Treatment against Brucella spp". Support will be provided for research by Latin American Institutions of the UNU Brucellosis Network to be carried out in vaccination and diagnosis of this disease. A monograph entitled "Networking in Brucellosis Research" is expected to be published by the UNU Press in the near future.

93. A training course on "Diagnostics of Human and Animal Disease" at IVIC in Caracas was held in November. Another short course on "Scaling-up of Biotechnological Process" was held this same month at the Universidad Nacional Autónoma de México. Additionally, BIOLAC has supported five relevant training courses by other institutions.

94. For more information on BIOLAC activities, see section on Institutional Development.

Microprocessors and informatics

95. The activities under this programme started originally under the project "Mastering Microprocessor Technology", undertaken from 1983 to 1987. Following a programme meeting in 1989, it was decided that the present project would undertake research, advanced training and dissemination activities focusing on three areas: integrated microprocessor-controlled instrumentation system; informatics for the efficient management of complex man-made systems; and strengthening of the teaching of micro-informatics in selected developing country institutions. The research into microprocessor technology and informatics is aimed at contributing to the efforts of developing countries to keep up in this rapidly developing area, to promote application of the technology in various enterprises and development projects, and to develop microprocessor-based expert systems. Most of the activities are being carried out jointly with other research institutions and universities throughout the world.

96. A high-level course on "The Design of Real-time Control Systems", held in October at the International Centre for Theoretical Physics (ICTP) in Trieste, for post-doctoral trainees was attended by UNU-affiliated participants from Africa and Latin America. Although the course was not co-sponsored by UNU, ICTP agreed to accept UNU trainees, as some were among the many trainees who had attended basic microprocessor colleges organized jointly by ICTP and UNU since 1981. Research activities at the ICTP Microprocessor Laboratory is also proceeding according to plans with the participation of 10 young researchers from developing countries, about half of them from universities in the developing world associated with UNU.

97. In cooperation with INRIA, postgraduate training and research on parallelism and artificial intelligence are proceeding at the University of Yaoundé in Cameroon. In addition, lecturers from universities in France collaborating with the Institut national de recherche en informatique et en automatique (INRIA) have also given lectures at other universities in West Africa and are thus contributing to the formation of a UNU/INRIA subregional research and training network. Discussions are also now under way to involve the International Centre for Pure and Applied Mathematics (CIMPA), in Nice, in the micro-informatics project, as a regional centre for advanced training and research in micro-informatics.

98. Of the joint research activities being carried out with the Asian Institute of Technology (AIT) in Thailand and at the University of Malaya, the project on Microprocessor-Based Medical Expert Systems has been successfully completed. A medical expert system adapted to use Thai characters was developed and software for computer-aided instruction in pharmacology has also been written. Other research, including on artificial intelligence, is continuing.

99. A major workshop, organized in cooperation with INRIA, was held in Paris in September, to identify the following topics of research for the project on Information and Decision Systems (INDES): integration of databases; knowledge bases and decision support systems; management of information technology at the strategic and operational levels; and design of information technology for strategic planning.

100. A final report of the project sponsored by UNU and Trinity College, Dublin, on "Micro-Processors and Informatics" was completed and is now being considered for publication.

101. Activities under this programme will be linked closely with those of the United Nations University International Institute for Software Technology (UNUIIST) in Macau.

Programme Area 5: Population, health and human welfare

Alternative rural-urban configurations

102. Taking as its focus the need to accommodate urban populations that will increase rapidly in the next few decades, this programme is aimed at defining critical policy-relevant research, creating appropriate linkages among academics and United Nations agencies, and disseminating relevant research findings to policy makers and the academic community. Several activities have been undertaken in this connection.

103. The increase growth of mega-cities in developing countries is posing critical problems for policy makers. A symposium, organized with the United Nations Population Division, with the participation of representatives of Habitat, UNCRD, the World Bank, UNDP and other scholars, was held at the UNU Centre, in October, on urban population growth and policy responses. It ushered in the start of innovative research and initiatives on mega-cities. Selected papers from the symposium are being prepared for publication. Recommendations are now being reviewed and will be tabled at the United Nations Population Division. A United Nations inter-agency meeting on mega-city research, following the symposium, was also useful for exchanging information on research and upcoming conferences.

104. UNU is also planning to undertake a study on "Emerging Asian-Pacific City Systems" next year, and will formulate similar studies in Latin America and Africa. The University's Institute of Advanced Studies, which is expected to be located next to the new headquarters building, will also carry out studies on certain aspects of mega-cities.

Food and nutrition for human and social development

105. The activities in this programme focus on research, policy-making, training and dissemination in efforts to contribute to the alleviation of hunger and malnutrition. It has a number of projects aimed at fulfilling these goals.

Rapid assessment procedures

106. A major global conference, with 150 participants from international and national institutions, was convened, in cooperation with UNICEF, WHO, IDRC (International Development Research Centre) and voluntary agencies in Washington, D.C., in November, on "Rapid Assessment Methodologies for Planning and

Evaluation of Health Related Programmes". Papers describing the use of RAP methodologies for evaluating the effect of intervention programmes on household and community behaviour and for sharing information on programme planning and improvement were presented. These are to be published as a book, which is intended to contribute to increased use and enhanced awareness of the methodology. A RAP training workshop was held in Brazil in August, in Kenya in September, focusing on its application in studying AIDS-related behaviour. A workshop in Cairo, Egypt, on family planning in October included a training section on RAP. Additional training workshops have been scheduled in Santiago, Chile, Brazzaville, Congo, Bobo Diulasso in Burkina Faso, and in Indonesia for the first months of 1991.

International dietary and energy consultative group (IDECG)

107. A workshop on "Improved Protein-Energy Intakes in Early Childhood and Human Capital Formation: The Guatemalan Oriente Study" took place in August in Italy. The publication of its findings will promote programmes for the prevention of malnutrition in the pre-school child. Proceedings of the IDECG workshop on Activity, Energy Expenditure and Energy Requirements of Infants and Children" were published in November.

International network of food data systems

108. A proposal for a regional food composition data centre for the Middle East and North Africa under MENAFOODS/INFOODS is being developed in conjunction with the Arab Gulf Programme for the United Nations Development Organization (AGFUND). A similar proposal is being developed for South Asia under SASIAFOODS/INFOODS.

109. An OCEANIAFOODS/INFOODS workshop on food composition databases was held in New Zealand in May; the National Nutrient Data Bank Conference was held in Virginia, United States of America, in June; and a meeting of the National Nutrient Data Bank Conference Programme took place in Washington, D.C., in September. Two INFOODS publications were completed: Compiling Data for Food Composition Data Bases and Food Composition Data Interchange Handbook. The companion International Dietary Intake Project (INFID) has continued to collect data from additional countries for epidemiological comparisons of the role of diet in causing chronic diseases.

Country health and nutrition transition (CHANT) project

110. This new activity will develop a series of monographs documenting the progress made by several developing countries in improving the nutrition and health of their populations to levels approaching or equal to those of the industrialized countries. A planning meeting was held in Costa Rica in October.

Joint AAU-UNU regional food and nutrition project for Africa

111. This project was reviewed in June 1990 and was found to be advancing in the planned activities, though it has proved difficult to adhere to its original schedule. It will be continued into 1991, with eight research proposals approved for funding. An abstracts periodical with food and nutrition articles related to the project is being planned.

Demography of hunger

112. As part of this cooperative activity with the Alan Shawn Feinstein World Hunger Programme of Brown University, a paper on "Hunger in the 1980s: backdrop for policy in the 1990s" was published in the journal, Food Policy (August issue). A monograph based on a search of the literature available on the factors that contribute to the vulnerability to hunger will be published in 1991.

Implications of demographic change

113. In collaboration with other United Nations agencies and a network of scholars, this programme is investigating the implications of global, regional population dynamics for development, environment, political order and human welfare. In doing so it plans to assess the consequences of population growth, the implications of differences between population growth rates in developed and developing countries, and issues related to changing demographic composition and population distribution.

114. There is disagreement on the consequences of future population growth on living standards, poverty and hunger patterns, renewable and non-renewable resources, and environmental quality. A second consideration is the differential between population growth rates of developing and developed countries. Some of the latter are experiencing fertility rates below replacement levels. International migration will also continue to be a major concern, particularly with regard to flows of refugees between developing countries. Thirdly, the demographic composition, indicating an increase in the elderly in industrialized nations and in an increasing number of developing countries and a simultaneous increase in young people in developing countries, has important social, economic, political and scientific implications.

115. Phase II of the UNU/ILO Asian Regional Project on International Labour Migration was launched in July. A preparatory workshop on the ILO/UNU Asian Regional Research Project on International Labour Migration was held in Thailand. It examined the impact of structural economic adjustment in Asia on international labour flows. The conclusion was reached that the proposed study should highlight economic and demographic determinants of trends and structural changes in the labour market and emerging patterns, taking into account country-specific issues and policy issues and responses.

116. Research proposals have been agreed upon and results of country studies will be presented in March 1991. Country and area studies are also being currently undertaken by scholars in participating institutions in Thailand, Hong Kong, Japan, the Philippines, Taiwan Province of China and Singapore.

Programme development

Programme on higher education

117. Working in collaboration with UNESCO and the International Association of Universities, UNU is conducting research and training on the concepts, nature, and functions of higher education in response to the changing needs of societies, with particular reference to the third world.

118. The aim of the programme is to analyse the nature and changing role of "universities" to seek new and better models of institutions for higher education, to provide guidelines for reshaping higher education systems in an effort to adapt them to the present and future needs of developing countries, and to improve communication and cooperation among institutions for higher education through information exchange and dissemination at the regional and international level.

119. The programme began at the end of 1989 with a study jointly by UNU and UNESCO on the evolution of the role of universities in developing countries. The study was conducted through the commissioning of a limited number of papers and the collection of selected documentation relevant to the focus of the study. These were complemented and synthesized through the organization of a small working panel (May 1990) to suggest conclusions and draft a synthesis report. A project report and the collection of six papers have been submitted to UNESCO. These will serve as input into the global reflection on higher education in UNESCO's agenda for the next few years.

Global modelling and warning system

120. Currently, two related projects are under consideration. One is the Millennium Project, which would undertake a historical assessment of future forecasting and study its relationship to policy development. A combined feasibility study, involving UNU, the Smithsonian Institute, and the Futures Group, has been proposed. The other is a UNU Conference on the Global Warning System: Modelling and Application (tentative title), scheduled for October 1991, as one of the activities related to the start-up of a programme of the Institute of Advanced Studies to be carried out in collaboration with the United Nations Projections and Perspective Studies Branch and the Soka University.

121. The Conference on the Global Warning System: Modelling and Application (tentative title) will review the applicability of the global modelling system to the UNU programme and assess policy implications of global models.

Global health issues

122. A planning meeting was held to explore the possible role for UNU in the area of health policies, taking into account the activities of WHO, including the Pan-American Health Organization (PAHO) and other organizations. An International Seminar on Health Policies is planned for January 1991.

Women as social actors in managing global change

123. This project aims at: (a) identifying the values and modes of behaviour representing women's culture, and (b) attempting a conceptual definition of equality between the two sexes, taking into consideration women's identity. A planning meeting was held in Paris in September on "Women as Social Actors in Managing Global Change" to discuss the project proposal. The proposal is now being finalized for submission to the University.

Training activities

124. During the year, 29 UNU fellows completed their studies, bringing the total number of fellows trained by the UNU since 1976 to 1,026. A total of 54 fellows started their training in 1990 in various fields as follows: 5 UNU/WIDER Fellows in Economics and Quantitative Techniques at the Bangladesh Institute of Development Studies (BIDS); 11 Fellows from seven countries at the UNU Training Programme in Geothermal Energy at the National Energy Authority (NEA), Iceland, bringing the total number of UNU fellows trained in this programme to 80; 5 Fellows from Asian countries in New and Renewable Sources of Energy at the Indian Institute of Technology, India; 6 fellows from countries in Latin America in Remote Sensing Technology at Institute de Pesquisas Espaciais, Brazil; 4 fellows in Science and Technology Policy at Universidade Estadual de Campinas in Brazil; 12 fellows from various institutions in Africa and Asia in Food Fermentation - Tempe Technology at the Nutrition Research and Development Centre, Indonesia; 9 fellows in Food Science and Technology at the Central Food Technological Research Institute (CFTRI) in India, Instituto de Nutrición de Centro América y Panamá (INCAP) in Guatemala, and the Korea Food Research Institute (KFRI); and 2 fellows in Biotechnology at the University of Buenos Aires, Argentina and Centro de Investigación y de Estudios Avanzados del IPN (CINVESTAV), Mexico.

125. As a result of UNU's continuing effort to raise additional resources for fellowships, most of the new fellowships in 1990 were implemented using the various cost-sharing arrangements the UNU has negotiated with various institutions, and external sources of funds. Thus, the Government of Iceland covered more than half of the total expenses for the UNU Geothermal Training Programme; the Japan Foundation for the UNU gave partial support for the course, given in India, on New and Renewable Sources of Energy; in Brazil, the courses in Remote Sensing Technology and Science and Technology Policy took place under the cost-sharing arrangements provided in the General Agreement of Cooperation between UNU and CNPq/CAPES of Brazil; the funds ($US 200,000) received from the Government of Denmark are being utilized for the training course in Tempe Technology in Indonesia, as well as for the related research activities of the trainees after their return to their respective countries. The training in Food Science and Technology in India and Korea has been implemented under cost-sharing arrangements between UNU and the Council of Scientific and Industrial Research (CSIR) in India, and between UNU and the Korea Food Research Institute (KFRI), respectively.

126. In addition to the regular UNU fellowships, other training activities have been undertaken in conjunction with the various programme activities of the

University. These training activities are reported under the respective programme areas.

Dissemination

127. Since the beginning of the year the University has published a number of books, from the Centre programme and WIDER programme activities, continuing issues of its four journals, Food and Nutrition Bulletin (F&B), Abstracts of Selected Solar Energy Technology (ASSET), Mountain Research and Development, and Food Composition Data, and working papers, research reports, and country studies. Book reviews on UNU books, based on research that was completed several years ago, have been appearing more frequently, focusing on contributions and importance to a given area of study. Some reviews that have appeared recently include those on "The Japanese experience in technology: from transfer to self reliance", by Takeshi Hayashi; Intra-household Resource Allocation: Issues and Methods for Development Policy Planning, edited by Beatrice Lorge Rogers and Nina P. Schlossman; Conflict Over Natural Resources in Southeast Asia and the Pacific, edited by Lim Teck Ghee and Mark J. Valencia; "Positive deviance in child nutrition", by Marian Zeitlin, Hossein Ghassemi and Mohamed Mansour; Debt, Stabilization and Development, edited by Ronald Finlay, Pennti Kouri and Jorge Braga de Macedo; Varieties of Stabilization Experience: Towards Sensible Macroeconomics in the Third World, by Lance Taylor; and "Food composition data: a user's perspective", edited by William M. Rand, Carol T. Windham, Bonita W. Wyse and Vernon R. Young. Several reviews also touched on the significance of UNU work. All of the University's journals also continued to receive high praise from readers and reviewers. Some of the books published appeared under the United Nations University Press imprint and some under the imprint of other publishers. An agreement was also reached with Butterworth Scientific (Publishers) whereby UNU would cooperate in the publication of a new journal Global Environmental Change: Human and Policy Dimensions. (For a full list of UNU press titles and titles from WIDER, published during the year, see annex II.)

128. With the reorganization of the University's publication unit as the United Nations University Press at the beginning of the year, steps were taken to expand the sales and distribution, increase advertising and reviewing, and improve the assessment of manuscripts to insure high quality publications. A brochure entitled United Nations University as a Scholarly Publisher: the United Nations University Press, describing briefly new directions and developments, has been produced and widely distributed. The Press is also looking at the possibility of accepting top quality outside manuscripts for publication under its imprint. It intends to do this without burdening the budget for UNU programme-generated titles. In addition, it is exploring a possible role for the Press in ongoing international efforts to aid developing country scholar-authors and publishers in gaining access to major publishing routes and markets. As part of its strategy to make UNU Press books more readily available to buyers in developing countries, a developing country price was introduced at the beginning of the year.

129. In the area of public information, there have been several developments during the year. The newsletter of the University, Work in Progress, brought out two

issues for the year, after a short period when publication had been suspended, on timely themes "A comprehensive view of the world in the 1990s" and "Universal human values". The first has been very well received. The aim of Work in Progress is to provide scholars and readers interested in UNU's work with a sampling of its research in various stages of progress, or outside material that has some bearing on it. WIDER also began to produce a quarterly newsletter, WIDER ANGLE, to inform interested readers about its activities and to serve as a forum for exchange of ideas. The first issue appeared in October.

130. Plans are also under way to develop a public information strategy that is more precisely designed for various audiences the University is trying to reach, such as the United Nations system, the public at large and scholars interested in general information about UNU's work.

IV. INSTITUTIONAL DEVELOPMENTS

131. As the number of new research and training centres and programmes increases, the University has had to consider a more decentralized and streamlined University programme structure. More thought has also gone into developing research and training centres and programmes as part of the University's goal of assisting the long-term enhancement of the research capabilities of universities and research institutes in developing countries. At present, there are about 10 research and training centres and programmes on the drawing board or being proposed for consideration. The topics, such as governance and conflict resolution, culture and development, software development for developing countries, human dimensions of global change, environment and human health, science and society, outer space, ocean affairs and marine science etc. are consistent with the priorities in MTP II and include areas on which UNU programmes could build. The establishment of all the research and training centres and programmes, each designed to respond to an aspect of the University's programme and have a proper niche in it, has been guided largely by the medium-term plans. Their establishment has also been in line with the basic concept of developing a decentralized system of institutes and programmes operating with a degree of autonomy under the authority of the Rector. In addition, research and training centres and programmes are providing more opportunities for potential donors to give funding for programme activities. However, the University recognized the need to elaborate the strategy outlined in MTP II to ensure that planned research and training centres and programmes are set up in accordance with the overall University programme structure and can provide the interaction necessary for programme coherence. This was confirmed by the Council at its thirty-fifth session in June this year. The University Centre has already begun to explore how to elaborate the strategy and indicated at the thirty-fifth session that it would be presenting a paper on institutional development strategy to the Council at its thirty-seventh session in the summer of 1991.

World Institute for Development Economics Research (WIDER)

132. WIDER has experienced considerable institutional growth and expansion of its programmes in the past year. A new Board was appointed during the year. It also began to involve more scholars from African and Eastern European countries in its activities. Recognizing that WIDER was completing its fifth year of operations, the Council requested the Rector to undertake an evaluation of WIDER's work. The evaluation process was started in the second half of the year. (See paras. 117-123 on programme developments, and 146-149 on fund-raising for details on WIDER developments.)

Institute for New Technology (INTECH)

133. The purpose of INTECH is to undertake research, advanced training, dissemination and advisory services on selected new technologies, particularly in relation to developing countries. The research programme will put emphasis on establishing a scholarly community *in situ* in Maastricht and the development of a network of cooperating institutions in developing countries. INTECH began operations in 1990 with the establishment of its Board in May and the appointment of the Director, Dr. Charles Cooper, in June.

Institute for Natural Resources in Africa (INRA)

134. The Director of the Programme for Natural Resources in Africa was appointed and temporary facilities have been made available at UNESCO's Regional Office of Science and Technology for Africa (ROSTA) in Nairobi. (Activities related to INRA are described in paras. 69-71.)

Biotechnology in Latin America and the Caribbean (BIOLAC)

135. Established in 1988, this programme is intended to pave the way for an eventual institute for biotechnology in Latin America and the Caribbean. BIOLAC's Scientific Advisory Committee held its second meeting in Caracas, Venezuela in April 1990. (For a description of work carried out, see paras. 91-94.)

Proposed Institute of Advanced Studies in Japan

136. Planning for the institute's establishment continued with preparations for construction of its building and some activities intended to contribute to developing its programme. Thus, the UNU "Global Seminar '90 on Communication and International Relations" was held in cooperation with eight Japanese universities, in Hakone, Japan, this September: 91 trainees from 16 countries participated. The first Japan-ASEAN Forum on "Development and ODA" took place in November to examine the role of Japan's ODA in the development of the Association of South-East Asian Nations (ASEAN) and identify directions for future cooperation. A public symposium on the same topic was also held.

Proposed United Nations University international institute for software technology

137. At its thirty-third session in July 1989, the Council endorsed the proposal for an Institute for Software Technology. Its purpose is to undertake research, advanced training and dissemination of knowledge on the development and adaptation of computer software to meet the needs of developing countries in software technology. The Institute is also intended to be of service to other UNU networks in enhancing computer-related implementation of research and training and to scholarly institutions throughout the developing world.

Proposed research and training centre on global environment and human health

138. The State of Baden-Württemberg and the University of Ulm, Germany, have shown interest in the establishment of a research and training centre on global environment and human health at Ulm. The feasibility study and an international consultative meeting have been completed. The draft of the study group's report is now being complemented by consultations with scientists from disciplines other than those represented within the group, and with relevant major international organizations.

Proposed research and training centre or programme on culture and development

139. Two international conferences were organized with the City of Fukuoka in March and September on the theme of culture and development in Asia and the Pacific. Researchers included experts from Asia, Europe and North America. They also discussed the draft of the feasibility study on a proposed institute on culture and development in Asia and the Pacific to be located in this city. The final report of the feasibility study was received in October and will be examined first by the in-house planning meeting. The Rector has forwarded a copy of the report to the Mayor of Fukuoka City for his observations and for further consultations. The Rector intends to submit the report to the Council at its thirty-seventh session in June 1991.

Proposed research and training centre on governance

140. A feasibility study team met twice in Barcelona, Spain, in May and October 1990 to define, in general terms, the organizational, operational and funding needs of the proposed centre. The meetings also considered various concepts and approaches of governance as manifested in different parts of the world. An interim report was produced after the first meeting and presented to the Council at its thirty-fifth session in June. As a result of the second meeting, a comprehensive report is now being prepared. Plans call for an international consultative meeting to be held in April 1991 to discuss the report, as well as a parallel project in the area of governance in Latin America and the Caribbean.

Proposed programme on ocean affairs and marine science

141. Preliminary consultations were conducted with the Rector of the University of Sassari, Sardinia, Italy, concerning cooperation in the area of ocean affairs and marine science. This project is envisaged particularly for the benefit of developing countries. A feasibility study is now being planned.

Proposed network of centres of excellence of international scope on new and renewable sources of energy

142. A survey financed by the Government of Italy, and in collaboration with the Office of the Director General for International Economic Cooperation and the Italian National Agency for Nuclear and Alternative Energy (ENEA), has identified nearly 800 institutions in developing countries involved in work related to new and renewable sources of energy. A progress report was presented to the United Nations Intergovernmental Committee on the Development and Utilization of New and Renewable Sources of Energy. The completed survey will be presented to the Consultative Group on New and Renewable Sources of Energy. Exploratory work also began on the establishment of a Working Group on Alternatives to Coal and Fuelwood, and on the establishment of a training course on energy conservation and efficiency.

Proposed international institute for leadership development

143. A feasibility study meeting on the establishment of an international institute for leadership development will be convened in spring 1991, building on the preliminary consultations, which took place in the fall of 1989. A donation of $US 30,000 in support of a feasibility study has been received from His Majesty King Hussein Ibn Talal of Jordan.

V. FINANCE AND FUND-RAISING

A. Finance

144. As the University is financed entirely by voluntary contributions from Governments and other sources, it is a continuous challenge to the University to mobilize the necessary financial resources required for its programmatic activities and institutional development. The University's main income is derived from the investment of its Endowment Fund. As of 31 December 1990, the University had received $US 177.6 million in actual payments to the Endowment Fund.

145. With the decline in the real value of the Endowment Fund, due mainly to exchange rate fluctuations and inflation, the University is taking a series of measures to better manage its financial resources. In this regard, the Council has decided to reinvest $US 2.8 million in the Endowment Fund. The University is currently undertaking discussions with the United Nations Secretariat to find the best possible approach to investment management of the Endowment Fund.

B. Fund-raising

146. During the year, the Rector and other senior staff undertook fund-raising missions to the following countries: Austria, Brazil, Brunei, Canada, Côte d'Ivoire, Cyprus, Egypt, Finland, France, Germany, Hungary, Ireland, Italy, Malaysia, Portugal, Senegal, Singapore, Spain, Thailand, United States of America, Union of Soviet Socialist Republics, Venezuela and Zambia.

147. As of 31 December 1990, pledges to the University's Endowment Fund and operating contributions from 48 countries and three other benefactors totalled $218.85 million of which $201.55 million had been received. During 1990, the following 21 Governments and two other benefactors pledged and/or contributed a total of $11.08 million to the University, as follows:

Governments	$US
Austria	88 689
Brazil	50 000
Colombia	11 811
Denmark	200 000
Egypt	50 000
Finland	122 476
France	69 565
State of Baden-Württemberg, Germany	89 771
Greece	40 000
India	75 000
Ireland	427 779
Regional Authority of Sardinia, Italy	241 935
Japan	1 200 000
Netherlands	3 188 962
Spain	152 796
Generalitat de Catalunya, Spain	40 000
Sweden	189 655
Switzerland	112 000
Trinidad and Tobago	17 559
United Republic of Tanzania	40 000
Zambia	641 387

Other benefactors	$US
King Hussein Ibn Talal, Jordan	30 000
Sasakawa Foundation, Japan	4 000 000

148. In addition, specific programme contributions in the amount of $US 2,528,909 were available for activities of the University in 1990, as follows:

Source	$US
Supply and Services Canada, Canada	120 690
Japan Foundation for the UNU, Japan	129 141
Japan Shipbuilding Industry Foundation, Japan	700 000
Tokyo Marine Kagami Memorial Foundation, Japan	49 324
Japan Solidarity Committee for Asia Alumni, Japan	5 474
Fukuoka Keiseikai, Japan	14 286
Kyushu Keizai Chosa Kyokai, Japan	27 027
Fukuoka City, Japan	41 667
Ford Foundation, United States	120 000
James S. McDonnell Foundation, United States	247 000
John D. and Catherine T. MacArthur Foundation, United States	489 800
UNDP (including $100,000 through ILO)	304 500
World Bank	50 000
Arab Fund for Economic and Social Development	230 000

149. The University also benefits from counterparts funds and other sources of support that were made available to the University's associated and other cooperating institutions and organizations for the purpose of carrying out collaborative programmes and projects, including cost-sharing arrangements for fellowships. Such counterpart funds were not provided directly to the University and, therefore, could not be included as part of the University's actual income.

Annex I

UNITED NATIONS UNIVERSITY COUNCIL MEMBERS

Appointed members

Professor Mihaly Simai, Director, Institute for World Economics, Hungarian Academy of Sciences; Professor and Director of Graduate Studies, Karl Marx University of Economic Sciences, Budapest, Hungary (Chairman of the Council)

Dr. Mary F. Berry, Geraldine R. Segal Professor of American Social Thought, University of Pennsylvania; former Professor of History and Law, Howard University, Washington, D.C.; Member, United States Commission on Civil Rights; Former United States Assistant Secretary for Education, Department of Health, Education, and Welfare; and former Chancellor, University of Colorado at Boulder, United States of America (Vice-Chairman and Chairman, Committee on Institutional and Programmatic Development)

Father Alfonso Borrero, Executive Director, Association of Colombian Universities; former Rector, Universidad Javeriana; and former President, National Council of Rectors of the Colombian Association of Universities, Bogotá

Dr. Umberto Colombo, Chairman, Italian National Agency for Atomic and Alternative Energy Sources (ENEA), Rome, Italy, and of the European Science Foundation; and former Chairman, Committee on Science and Technology in the European Community; of the Committee on Science and Technology of the Organisation for Economic Co-operation and Development (OECD); and of the Advisory Committee on Science and Technology for Development of the United Nations

Ambassador Kuniyoshi Date, former Ambassador Extraordinary and Plenipotentiary to the Republic of Iraq and to the Federative Republic of Brazil; and former Managing Director, Japan Foundation, Tokyo

Dr. Claude Frejacques, Professor and former Chairman, Centre national de la recherche scientifique; Member, Acadímie des sciences; former Chairman, Dílígation à la Recherche scientifique et technique; former Director, Commissariat à l'Energie atomique; and former Professor, Ecole polytechnique, Paris

Dr. Keith B. Griffin, Professor and Chairman, Department of Economics, University of California (Riverside), United States of America; and former President, Magdalen College, Oxford University, United Kingdom of Great Britain and Northern Ireland (Vice-Chairman and Chairman, Committee on Finance and Budget)

Dr. Sippanondha Ketudat, President, National Petro-Chemical Corporation, Ltd.; Senator, National Legislative Assembly; former Minister of Education, Bangkok, Thailand; former Member, Governing Board of UNESCO's International Institute of Educational Planning; and former Professor of Physics, Chulalongkorn University

Professor Joseph Ki-Zerbo, Professor, University of Dakar; Researcher, Cheik Anta Diop Institute, University of Dakar, Dakar, Senegal; and former Member, Executive Board of UNITAR (Vice-Chairman)

Father Felipe E. Mac Gregor, Rector, Colegio de la Inmaculada; President, Comisión Academica de la Universidad del Pacifico; Rector Emeritus, Pontificia Universidad Catolica del Peru, Lima; former Member, Governing Board of the International Association of Universities; and former Member of the United Nations University Council (1977-1983)

Dr. Lucille Mair, Minister of State, Ministry of Foreign Affairs, Trade and Industry, Kingston; former Deputy Permanent Representative of Jamaica to the United Nations; former Secretary-General of the 1984 International Conference on the Question of Palestine and of the 1980 World Conference of the United Nations Decade for Women; and former Director of Public Information of Jamaica (Vice-Chairman and Chairman, Committee on the Report of the Council)

Dr. Abdel Salam Majali, Advisor to His Majesty The King; Chairman, World Affairs Council; former President, University of Jordan, and Professor, College of Medicine of the University; former Minister of Health; of Education; and of State for Prime Ministry Affairs, Amman, Jordan; and former Member of the United Nations University Council (1977-1983)

Professor Lydia Makhubu, Vice-Chancellor and Professor of Chemistry, University of Swaziland; President, Royal Swaziland Society of Science and Technology; Chairman, Government of Swaziland's Ad Hoc Committee on Science and Technology, Kwaluseni, Swaziland; Member, United Nations Advisory Committee on Science and Technology for Development; and Fellow, African Academy of Sciences

Dr. Vladlen A. Martynov, Director, Institute of World Economy and International Relations; and Corresponding Member, USSR Academy of Sciences, Moscow

Professor Candido Mendes de Almeida, President, International Social Science Council; and Sociedade Brasileira de Instruçao, Rio de Janeiro

Professor M. G. K. Menon, former Minister of State for Science and Technology, Ministry of Science and Technology; former Scientific Adviser to the Prime Minister of India; Member, Planning Commission, Government of India, New Delhi

Professor Fatima Mernissi, Professor and Researcher, Institut universitaire de la recherche scientifique, Université Mohamed V, Rabat

Dr. Martha V. Mvungi, Field Director, Training Fund for Tanzanian Women; Chairman, Board of Directors for the Tanzania News Agency; Member, International Literacy Jury, UNESCO; Founder/Board Member, International Science Village for Tanzania; Senior Lecturer, Department of Education, University of Dar es Salaam; and former Secretary-General, National Commission of UNESCO, Dar es Salaam

Dr. Rafael Portaencasa, Rector, Polytechnical University of Madrid and Full Professor, Faculty of Informatics of the University; President, Council of Spanish Rectors; and Member, Spanish University Council, Madrid

Professor Rehman Sobhan, Director-General, Bangladesh Institute of Development Studies; formerly Member, Bangladesh Planning Commission, Professor of Economics, Dhaka University; and Member, United Nations Committee for Development Planning, Dhaka

Dr. Justin Thorens, Professor, Faculty of Law, University of Geneva, Geneva, Switzerland; former President, International Association of Universities, Paris; and former Rector, University of Geneva

Professor Raimo Vayrynen, International Relations, University of Helsinki; former Director, The Helsinki Institute, Helsinki, Finland; former Secretary-General, International Peace Research Association; and former Director, Tampere Peace Research Institute

Professor Josephine Guidy Wandja, Professor of Mathematics, Université nationale de Côte d'Ivoire and of Recherche opérationelle, Ecole nationale d'Administration, Abidjan, Côte de Ivoire

Professor Yao Erxin, Assistant Director-General, Department of International Co-operation, State Science and Technology Commission, Beijing, China; Member, Technical Advisory Committee of the Asia and Pacific Center for Technology Transfer of China National Committee for UNESCO; and Adviser to the Chinese Governor to the International Atomic Energy Agency (Vice-Chairman and Chairman, Committee on Statutes, Rules and Guidelines)

Rector

Professor Heitor Gurgulino de Souza

Ex officio members

Mr. Javier Pérez de Cuéllar, Secretary-General, United Nations, New York

Dr. Federico Mayor, Director-General, United Nations Educational, Scientific and Cultural Organization, Paris

Dr. Michel Doo Kingué, Executive Director, United Nations Institute for Training and Research, New York

Annex II

LIST OF PUBLICATIONS OF THE UNITED NATIONS UNIVERSITY, JANUARY-AUGUST 1990

Books

African Agriculture: The Critical Choices, edited by Hamid Ait Amara and Bernard Founou-Tchuigoua; published with Zed Books, United Kingdom

América Latina, Hoy, edited by Pablo Gonzalez Casanova; published with Siglo Vientiuno Editores, Mexico

Arabu no mirai, by Ismail-Sabri Abdalla et al; published with Tosui Shobo, Japan

Colonization and Environment: Land Settlement Projects in Central America, by Jeffrey R. Jones

Conflict and Peace in the Global Context, 3 vols. (in Japanese), translated and edited by K. Mushakoji and T. Urano; published with Kokusai Shoin, Japan

Conflict Over Natural Resources in Southeast Asia and the Pacific, edited by Lim Teck Ghee and Mark J. Valencia; published with Oxford University Press, Singapore

Cultural y política en America Latina, edited by Hugo Zemelman; published with Siglo Vientiuno Editores, Mexico

Debt, Stabilization and Development, edited by Guillermo Calvo, Ronald Findlay, Pennti Kouri and Jorge Braga de Macedo; published with Basil Blackwell, United Kingdom

Dominating Knowledge: Development, Culture, and Resistance, edited by Frédérique Apffel Marglin and Stephen A. Marglin; published with the Clarendon Press, Oxford

Economic Liberalization: No Pancea, edited by Tariq Banuri, published with the Clarendon Press, Oxford

Food and Energy: Strategies for Sustainable Development, by Ignacy Sachs and Dana Silk

Intra-household Resource Allocation: Issues and Methods for Development Policy and Planning, edited by Beatrice Lorge Rogers and Nina P. Schlossman

La coopération arabo-sénégalaise, by Charles Zarour published with Editions L'Harmattan, France

La crisis en América Latina: Los desafíos continentales, by P. Vuscovic; published with Siglo Vientiuno Editores, Mexico

Migration to the Arab World: Experience of Returning Migrants, edited by Godfrey Gunatilleke

Brucellosis Research: The Experiences and Advantage of Networking, edited by Julius Frank

Outer Space - A Source of Conflict, edited by Bhupendra Jasani

Science, Hegemony and Violence: A Requiem for Modernity, edited by Ashis Nandy; paperback edition, published with Oxford University Press, India

Self-Reliance in Science and Technology for National Development, edited by Saneh Chamarik

Styles of Management and Entrepreneurship in Asia, edited by Toshio Shishido

The Ethnic Question: Conflicts, Development, and Human Rights, by Rodolfo Stavenhageb

The Golden Age of Capitalism: Reinterpreting the Postwar Experience, edited by Stephen Marglin and Juliet Schor; published with the Clarendon Press, Oxford

The Japanese Experience in Technology: From Transfer to Self-Reliance, by Takeshi Hayashi

The Textile Workers in Brazil and Argentina: A Study of the Interrelationships between Work and Household, by Liliana Acero

Trade Policy, Industrialization and Development: New Perspectives, edited by Gerald K. Helleiner, published with the Clarendon Press, Oxford

Varieties of Stabilization Experience: Towards Sensible Macroeconomics in the Third World, by Lance Taylot; published with the Clarendon Press, Oxford

Wood Fuel in Kano, by R. A. Cline-Cole, J. A. Falola, H. A. C. Main, M. J. Mortimore, J. E. Nichol, and F. D. O'Reilly

Journals

Abstracts of Selected Solar Energy Technology (ASSET), vol. 10, Nos. 1 and 2 (Tata Energy Research Institute)

Food and Nutrition Bulletin, vol. 12, No. 1

Journal of Food Composition and Analysis, vol. 3, No. 1 (Academic Press)

Mountain Research and Development, vol. 10, No. 1 (International Mountain Society)